In the Claims:

Please cancel claim 11.

12. (Previously Amended) An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated a gap from, an edge of the other sheet metal workpieces;

a backing element disposed on a first side of the sheet metal workpieces; and

a spherically shaped squeeze roller, disposed on a second side of the sheet metal workpieces opposite the first side and substantially aligned with the backing element;

wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap.

13. (Previously Added) The apparatus of claim 12, wherein the squeeze roller is mounted on a support to permit rotation in any direction.

14. (Previously Added) The apparatus of claim 13, wherein the support forms an acute angle with a plane formed by the sheet metal workpieces.

15. (Previously Added) The apparatus of claim 14, further comprising a workpiece brake that can be selectively actuated into contact with one of the sheet metal workpieces and thereby cause the contacted sheet metal workpiece to be clamped between the backing element and the workpiece brake.

16. (Previously Added) The apparatus of claim 15, wherein the workpiece brake is disposed at an acute angle relative to the contacted sheet metal workpiece.

17. (Previously Added) The apparatus of claim 16, further comprising:

a gap sensing device for sensing the width of the gap adjacent the squeeze roller;

a controller for controlling the amount of force applied to the squeeze roller as a function of the gap adjacent the squeeze roller, thereby controlling the gap between the sheet metal workpieces.

18. (Previously Added) The apparatus of claim 17, further comprising a gap position sensor for determining the position of the gap after deformation, and a welding machine guide operably connected to the gap position sensor, wherein the welding machine guide guides the welding machine relative to the gap using input from the gap position sensor.

19. (Previously Added) The apparatus of claim 13, further comprising a workpiece brake that can be selectively actuated into contact with one of the sheet metal workpieces and thereby cause the contacted sheet metal workpiece to be clamped between the backing element and the workpiece brake.

20. (Previously Added) The apparatus of claim 19, wherein the workpiece brake is disposed at an acute angle relative to the contacted sheet metal workpiece.

21. (Previously Added) The apparatus of claim 13, further comprising:

a gap sensing device for sensing the width of the gap adjacent the squeeze roller;

a controller for controlling the amount of force applied to the squeeze roller as a function of the gap adjacent the squeeze roller, thereby controlling the gap between the sheet metal workpieces.

22. (Previously Added) The apparatus of claim 13, further comprising a gap position sensor for determining the position of the gap after deformation, and a welding machine guide operably connected to the gap position sensor, wherein the welding machine guide guides the welding machine relative to the gap using input from the gap position sensor.

Please cancel claims 23 and 24.

25. (Presently Amended) ~~The apparatus of claim 11, further comprising~~ An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated by a gap from, an edge of the other sheet metal workpieces;

a backing element disposed on a first side of the sheet metal workpieces; ~~and~~

a squeeze roller, disposed on a second side of the sheet metal workpieces opposite the first side and substantially aligned with the backing element, wherein the squeeze roller is formed as a body symmetrical in rotation, and wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap;

a gap sensing device for sensing the width of the gap adjacent the squeeze roller; and

a controller for controlling the amount of force applied to the squeeze roller as a function of the gap adjacent the squeeze roller, thereby controlling the gap between the sheet metal workpieces.

26. (Presently Amended) ~~The apparatus of claim 11, further comprising~~ An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated by a gap from, an edge of the other sheet metal workpieces;

a backing element disposed on a first side of the sheet metal workpieces;

a squeeze roller, disposed on a second side of the sheet metal workpieces opposite the first side and substantially aligned with the backing element, wherein the squeeze roller is formed as a body symmetrical in rotation, and wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap;

a gap position sensor for determining the position of the gap after deformation~~,~~; and

a welding machine guide operably connected to the gap position sensor, wherein the welding machine guide guides the welding machine relative to the gap using input from the gap position sensor.

Please cancel claims 27 and 28.

29. (Previously Amended) An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated a gap from, an edge of the other sheet metal workpieces; and

means for plastically deforming one of the sheet metal workpieces, wherein the means can be selectively applied to cause that sheet metal workpiece to extend into the gap, and wherein the means includes a backing element disposed on a first side of the sheet metal workpieces, and a spherically shaped squeeze roller that is mounted on a support to

permit rotation in any direction and disposed on a second side of the sheet metal workpieces opposite the first side and substantially aligned with the backing element, wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap.

Please cancel claim 30.

31. (Presently Amended) ~~The apparatus of claim 28, further comprising~~ An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated by a gap from, an edge of the other sheet metal workpieces;

means for plastically deforming one of the sheet metal workpieces, wherein said means for plastically deforming one of the sheet metal workpieces can be selectively applied to cause that sheet metal workpiece to extend into the gap, wherein the means for plastically deforming one of the sheet metal workpieces includes a backing element disposed on a first side of the sheet metal workpieces, and a squeeze roller disposed on a second side of the sheet metal workpieces opposite the first side and substantially aligned with the backing element;

wherein the squeeze roller is formed as a body symmetrical in rotation, and wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap;

a gap sensing device for sensing the width of the gap adjacent the squeeze roller; and

a controller for controlling the amount of force applied to the squeeze roller as a function of the gap adjacent the squeeze roller, thereby controlling the gap between the sheet metal workpieces.

32. (Presently Amended) ~~The apparatus of claim 28, further comprising~~ An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated by a gap from, an edge of the other workpieces;

means for plastically deforming one of the sheet metal workpieces, wherein said means for plastically deforming one of the workpieces can be selectively applied to cause that sheet metal workpiece to extend into the gap, wherein the means for plastically deforming one of the sheet metal workpieces includes a backing element disposed on a first side of the sheet metal workpieces, and a squeeze roller disposed on a second side of the workpieces opposite the first side and substantially aligned with the backing element;

wherein the squeeze roller is formed as a body symmetrical in rotation, and wherein force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap;

a gap position sensor for determining the position of the gap after deformation~~,~~; and

a welding machine guide operably connected to the gap position sensor, wherein the welding machine guide guides the welding machine relative to the gap using input from the gap position sensor.

Please cancel claim 33.

34. (Previously Amended) An apparatus for handling a pair of sheet metal workpieces to be welded, comprising:

a first workpiece holder;

a second workpiece holder;

wherein the first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated a gap from, an edge of the other workpieces;

a pair of backing elements disposed on a first side of the sheet metal workpieces; and

a pair of squeeze rollers, disposed on a second side of the workpieces opposite the first side and substantially aligned with the backing elements, wherein the squeeze rollers are spherically shaped, and wherein force selectively applied to the squeeze rollers will cause plastic deformation in the pair of sheet metal workpieces and thereby cause the sheet metal workpieces to extend into the gap.

35. (Previously Added) The apparatus of claim 34, wherein each of the squeeze rollers is mounted on a support to permit rotation in any direction.

Please cancel claims 36-38.

39. (Presently Amended) ~~The method of claim 38, further comprising the step of~~ A method for welding a pair of sheet metal workpieces with a butt joint, comprising the steps of:

positioning the first and second workpieces so that an edge of one of the pair of sheet metal workpieces is substantially in contact with an edge of the other of the pair of workpieces;

plastically deforming at least one of the workpieces with a squeeze roller before or in a welding zone to reduce a width of any gap present between the first and second workpieces, wherein the at least one workpiece is plastically deformed in a region of the workpiece immediately adjacent to the edge of the workpiece;

guiding the squeeze roller along a joint of any desired curve form in a manner such that the plastic deformation produced is substantially dependent on the force acting on the squeeze roller and is substantially independent of the line of the joint,

welding the workpieces together at the joint with a laser; and

guiding the laser so as to track the position of the gap resulting from the plastic deformation.

Please cancel claim 40.

41. (Presently Amended) ~~The method of claim 40, further comprising the steps of~~ A method for handling a pair of sheet metal workpieces to be welded, comprising the steps of:

positioning the first and second workpieces so that an edge of one of the pair of sheet metal workpieces is substantially in contact with an edge of the other of the pair of workpieces;

plastically deforming at least one of the workpieces with a squeeze roller along the edge that is substantially in contact with the other workpiece to reduce a width of any gap present between the first and second workpieces, wherein the plastic deformation occurs before or in a welding zone;

guiding the squeeze roller along the edge in a manner such that the plastic deformation produced is substantially dependent on the force acting on the squeeze roller and is substantially independent of the line of the joint;

sensing the width of the gap adjacent the squeeze roller with a gap sensing device; and

controlling the amount of force applied to the squeeze roller as a function of the gap adjacent the squeeze roller, thereby controlling the gap between the sheet metal workpieces.

42. (Presently Amended) ~~The method of claim 40, further comprising the step of~~ A method for handling a pair of sheet metal workpieces to be welded, comprising the steps of:

positioning the first and second workpieces so that an edge of one of the pair of sheet metal workpieces is substantially in contact with an edge of the other of the pair of workpieces;

plastically deforming at least one of the workpieces with a squeeze roller along the edge that is substantially in contact with the other workpiece to reduce a width of any gap present between the first and second workpieces, wherein the plastic deformation occurs before or in a welding zone;

guiding the squeeze roller along the edge in a manner such that the plastic deformation produced is substantially dependent on the force acting on the squeeze roller and is substantially independent of the line of the joint;

determining the position of the gap after deformation using a gap position sensor; and

guiding a welding machine operably connected to the gap position sensor, wherein the welding machine guide is guided relative to the gap using input from the gap position sensor.